Campinas. The expectations of the components of 2 groups in the beginning and in the end of the course will be evaluated.

In the initial part, are woven considerations about the medical teaching and its characteristics. It is presented brief report about the beginning of the medical attendance and of the foundation of the medical schools in Brazil. In adittion to this, it is presented small history of the Neurology and of the Infantile Neurology in our country.

It is approached the teaching of Neurology in medical graduation course and it is stood out the importance of the Medical Residence courses to prepare qualified and modernized professionals in their area of performance front the new knowledge in Medicine.

At the end, the results of the researchs are presented and are woven considerations related to each researched segment.

**KEY WORDS**: formation and training centers in infantile neurology; medical residence in infantile neurology.

ANALYSIS OF HLA DQ, DP, DR ALLELES ASSOCIATED WITH MULTIPLE SCLEROSIS SUSCEPTIBILITY IN A POPULATION OF PATIENTS FROM THE RIO DE JANEIRO CITY (ABSTRACT) \* **DISSERTATION**. **NITERÓI**, **2002**.

## CLÁUDIO CÉSAR CIRNE SANTOS \*\*

Multiple sclerosis (MS) is a chronic inflammatory disease of the human central nervous system of putatively autoimmune origin characterized by multifocal demyelination. Genetic and environmental factors are thought to be involved in the pathogenesis of MS, with the disease considered rare in tropical countries, including Brazil. Genetic studies indicate that the major histocompatibility complex (MHC)/HLA region on chromosome 6p21 contains MS-predisposing component(s). However, which gene(s) present in this region are responsible for MS susceptibility in the brazilian population is still an unsettled issue.

This study aimed to analyze the frequencies of HLA class II alleles (DQA1\*0102, DQB1\*0602, DPA1\* 0301, DRB1\*1501, DRB1\*1503) expression in a group of MS patients from the Rio de Janeiro city. It was included 42 individuals (73.8% female and 26.2% male) with clinically definite MS with age range of 15 to 55 years. In relation to ethnic background, MS patients were of white/caucasian (CA) descendent (76.2%) and (23.8%) black/african-brazilian (AF) descendent. Age-matched (16 to 58 years) control healthy individuals, consisted of 53.6% (female) and 46.4% (male) with the following ethnic background: 58.3% white/caucasian descendent and 41.7% black/african-brazilian descendent. HLA

typing was performed by amplification of the DNA isolated from peripheral leukocytes with Polymerase Chain Reaction (PCR) followed by SSOP hybridization.

MS patients showed a positive association for alleles DQB1\*0602 (Pc=0.021; RR=2.40) and DQA1\*0102 (Pc= 0.0041; RR=3.30). Likewise, increased frequencies of DQB1\*0602 (45.2%) and DQA1\*0102 (35.7%) endowed strong correlation of this allele combination with disease susceptibility in CA patients. DR2 haplotype frequencies among healthy individuals and MS group was low. Since both (CA, AF) ethnic groups of MS patients showed very low frequencies of DRB1\*1501 and DRB1\*1503 it is suggested that another DRB allele association may be conferring susceptibility to MS in this population. Finally the low frequency (RR=0.36) of DPA1\*0301 allele consistently observed in our MS patients but not in the control group, indicate that such allele may rather have a protective role against MS.

In conclusion, genetic susceptibility to MS in brazilian individuals may depend upon a specific allele mosaic interacting at several loci necessary to reach a critical threshold for disease development.

**KEY WORDS**: multiple sclerosis, HLA, autoimmune disease, demyelination

<sup>\*</sup>Ensino da neurologia infantil no Brasil: aspectos atuais, desafios e perspectivas (Resumo). Tese de Doutorado, Universidade Estadual de São Paulo (UNICAMP) (Área: Neurologia). Orientadora: Sylvia Maria Ciasca

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<sup>\*</sup>Análise de alelos HLA DQ, DP, DR associados à suscetibilidade à esclerose múltipla numa população de pacientes da cidade do Rio de Janeiro (Resumo). Dissertação de Mestrado, Universidade Federal Fluminense (UFF) (Área: Biologia Celular e Molecular). Orientadoras: Izabel Christina P. Frugulhetti & Thereza Quírico-Santos. Consultoria: Soniza Vieira Alves-Leon. Financial support: CAPES, CNPq

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